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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/606,233	02/23/96	SLEMMER	W 93-C-07C1
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B5M1/0607

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EXAMINER

ART UNIT	PAPER NUMBER
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2504

DATE MAILED:

06/07/96

#13

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/606,233

Applicant(s)

Slemmer

Examiner

Terry D. Cunningham

Group Art Unit

2504



☒ Responsive to communication(s) filed on Feb 23, 1996

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1, 4-14, and 17-30 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 4-14, and 17-30 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit 2504

It is initially noted that the new matter rejection made in the previous office action is hereby removed. This rejection was made in response to an inadvertent clerical error.

Claims 1, 4-14 and 17-30 are rejected under 35 U.S.C. § 112, first paragraph, because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention.

The specification fails to properly enable the circuit shown in Fig. 2, which is an integral part of the overall invention. In line 4 of page 7 an equation is provided to describe the operation of the circuit, however, it is not clearly understood what this equation is intended to disclose nor is such even properly described. The specification fails to properly and understandably identify the terms in this equation. Line 5 of page 7 states that " V_T is the absolute value of the threshold voltage". This statement is not at all understood because nowhere does it state what in particular this is the "threshold" of. Similarly, line 6 does not state what element " V_{BE} " is the "base emitter voltage" of. In addition, lines 8 and 9 do not state what element or elements " q " is the "electronic charge" of. Clearly, these terms should be properly described with respect to the individual equations provided as equations 2-5. Also, with respect to equation 1, it does not appear that constants K_1 - K_3 are correctly stated. Line 25 of page 7 states that "constants K_1 - K_3 from equation (1) may be set by resistors and scaled transistors in the current mirrors". From this it would appear that it is necessary that there be at least four (4) constant terms (i.e. K_1 - K_4) corresponding to specific resistor values R_1 - R_4 . Further, it does not appear that equation 1 is correct. From line 20, equation 3, it appears that the term " $K_2 V_{BE}$ " in equation 1 should be changed to $-\frac{K_2 V_{BE}}{q}$. In addition, equations 2-5 are not clearly understood because the symbol " α " is not recognized, thus, it is not clear what the equations are stating.

Claims 1, 4-14 and 17-30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1, line 12, the equation therein is not understood due to the insufficient description of the terms in lines 13-19. In line 13, the phrase " V_T is the predetermined threshold voltage which defines the minimum acceptable voltage of V_{cc} " is not at all understood. Firstly, there is still no antecedent for this phrase. The amendment does not affect this rejection. Secondly, this phrase still does not state what this voltage is the "threshold" of. And thirdly, it is not at all understood what "the minimum acceptable voltage of V_{cc} " is in relation to. In line 15, the phrase "defined by a selected transistor which comprises a current source within the plurality of current sources" is not clearly understood. It is suggested that this phrase be changed to --a transistor in a predetermined one of the plurality of current sources--. In line 17, it is not understood what " kT/q " is the "thermal voltage" of. Clearly, there are many elements provided in the disclosed circuit. This term clearly is not a "thermal voltage" for the overall circuit, especially since such is notoriously well as referring to the "thermal voltage" of a single element. In line 19, it is not states what the constants K_1 , K_2 and K_3 are related to. The specification clearly states that these constants are related to aspects of the circuit (i.e., the resistance and transistor scaling).

Claims 4-14 and 17-30 are rejected for similar reasons as claim 1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 14, 27 and 28 are rejected under 35 U.S.C. §102(b) as being anticipated by Bingham. Bingham discloses, in Figs. 1 and 3, a circuit comprising: "a first circuit (20 of Fig. 1)"; "a direct current sum bandgap voltage comparator (36 and 56 of Fig. 3)" having "a summing node (52 of Fig. 3)", "a plurality of current sources (110 and 116 of Fig. 3)" and "an indicator circuit (56 of Fig. 3)"; "a switching circuit (40 and 48 of Fig. 3)"; "a primary power supply (14 of

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Fig. 1)"; and "a secondary power supply (22 of Fig. 1)", all connected and operating similarly as recited by Applicant.


Examiner has considered Applicant's remarks for the above rejection, however, since the terms for the equation still cannot be understood, it is not seen that such recitation can read over the prior art.

Claims 4-13 and 17-26 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 112.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terry Cunningham at telephone number (703) 308-4872. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

The fax phone number for Art Unit 2504 is (703) 308-7722. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

TC
June 4, 1996


Terry D. Cunningham
Primary Examiner
Group Art Unit 2504